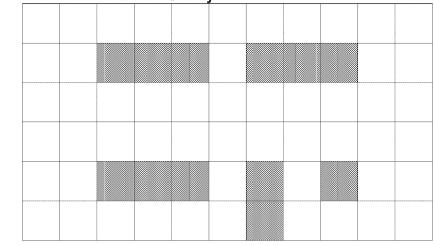
**Draft Approved Document B Fire Safety** 

**Comments December 2004** 



General Data

8 ⊠

11 M

The dwellinghouse is two storey (grid 1m)

The side dimensions are 11m long and 6m high

The total area of unprotected area is  $3m^2 + 3m^2 + 3m^2 + 2m^2 + 1m^2 = 12 m^2$ 

Using Method 1 Small residential (in accordance with current ADB)

The total area of unprotected areas is  $12m^2$  therefore the minimum distance between the side of the dwellinghouse and the relevant boundary is 2m (in accordance with Diagram 46)

Boundary distance 2m

Using Method 2 Other buildings or compartments (in accordance with current ADB)

The total area of unprotected areas is 12m<sup>2</sup>

The area of the side of the building is  $(11 \times 6) 66 \text{m}^2$ 

The total percentage of unprotected area is 12/66 X 100 = 18.18% say 18%

From Table 16 the minimum distance between the side of the building and the relevant boundary for residential PG is 2.25m (by interpolation)

Boundary distance 2.25m

Using Method 2 Other buildings or compartments (using the clarification of proposed 'note c')

The total area of unprotected areas is 12m<sup>2</sup>

The area of the actual (smallest) rectangle that encloses the unprotected areas (5 x 7) =  $35m^2$ 

The total percentage of unprotected area is 12/35 x 100 = 34.28% say 34%

From Table 16 for Residential the minimum distance between the side of the building is and the relevant boundary is 4.25m (by interpolation)

Boundary distance 4.2m

Alternative approach using Appendix A of BR 187

The total area of unprotected areas is 12m<sup>2</sup>

The dimensions of the actual (smallest) rectangle that encloses the unprotected areas is 5m high and 7m wide

To find the distance from boundary using the formula in Appendix A to BR187 d =  $g \times \sqrt{(uwh)}$ 

d = distance from relevant boundary

u = proportion of the enclosing rectangle that is unprotected 12/35 x 100 = 34% or 0.34

w = the width of the enclosing rectangle (7m)

h = the height of the enclosing rectangle (5m)

g = factor from BR187 Table 4 (for w/(uh) which is 7/0.34x5 = 4.1 therefore g = 0.61 from table)

 $d = 0.61 \times \sqrt{(0.34 \times 7 \times 5)}$ 

d = 2.1

Boundary distance 2.1m

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